



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,885	11/02/2001	Michael L. Boucher	30014200-1001	8291

26263 7590 03/22/2005

SONNENSCHN NATH & ROSENTHAL LLP  
P.O. BOX 061080  
WACKER DRIVE STATION, SEARS TOWER  
CHICAGO, IL 60606-1080

EXAMINER

BONZO, BRYCE P

ART UNIT	PAPER NUMBER
----------	--------------

2114

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/002,885

Applicant(s)

BOUCHER ET AL.

Examiner

Bryce P Bonzo

Art Unit

2114

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**NON-FINAL OFFICIAL ACTION**

***Status of the Claims***

Claims 1-73 are rejected under 35 USC §102(b).

***Rejections under 35 USC §102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-73 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (United States Patent No. 5,553,235).

As per the claims, Chen discloses:

1. A method in a data processing system having a program with a plurality of threads having a plurality of states, the method comprising the steps of:

Art Unit: 2114

running the program and determining the state of each thread during a measuring period, wherein the measuring period comprises a plurality of time intervals (Table 2, Figure 2e, Figure 26, column 23);

receiving user input indicating a selected one of the plurality of states (column 24, lines 45-52);

receiving user input indicating a selected one of the plurality of threads (column 24, lines 53-63);

determining a portion of the measuring period during which the selected thread is in the selected state (Figure 12e this determination must be performed to manufacture this graph);

determining, during the portion of the measuring period, whether another thread other than the selected thread is in another state other than the selected state (column 23); and

when it is determined that the other thread is in the other state, determining an amount of time that the other thread is in the other state (column 23).

2. The method of claim 1, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the other thread is in the other state (column 23, lines 43-59).

3. The method of claim 1, further comprising the steps of:

determining, during the portion of the measuring period, whether the other thread is in the selected state (column 23, lines 43-59);

when it is determined that the other thread is in the selected state, determining a second amount of time that the other thread is in the selected state (column 23, lines 43-59); and

calculating a percent of the portion of the measuring period that constitutes the second amount of time that the other thread is in the selected state (column 23, lines 43-59).

4 A method in a data processing system having a program with a plurality of threads having a plurality of states, wherein the program executes during a measuring period and the measuring period comprises a plurality of time intervals, the method comprising the steps of (Table 2, Figure 2e, Figure 26, column 23):

receiving user input indicating one of the plurality of states to anchor (column 24, lines 45-52);

receiving user input indicating a selected one of the plurality of threads (column 24, lines 45-52);

determining a portion of the measuring period during which the selected thread is in the anchored state (figure 12e);

determining, during the portion of the measuring period, whether another thread other than the selected thread is in another state other than the anchored state (column 23); and

when it is determined that the other thread is in the other state, determining an amount of time that the other thread is in the other state (column 23).

5. The method of claim 4, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the other thread is in the other state (column 23, lines 43-59).

6. The method of claim 4, further comprising the steps of:

determining, during the portion of the measuring period, whether the other thread is in the anchored state (column 23, lines 43-59);

when it is determined that the other thread is in the anchored state, determining a second amount of time that the other thread is in the anchored state (column 23, lines 59); and

calculating a percent of the portion of the measuring period that constitutes the second amount of time that the other thread is in the anchored state (column 43-59).

7. A method in a data processing system having a program with a plurality of threads having a plurality of states, wherein the program executes during a measuring period and the measuring period comprises a plurality of time intervals, the method comprising the steps of (Table 2, Figure 2e, Figure 26, column 23):

receiving user input indicating a selected one of the plurality of states (column 24, lines 45-52);

receiving user input indicating a selected one of the plurality of threads (column 24, lines 45-52); and

determining a portion of the measuring period during which the selected thread is in the selected state (column Figure 12e).

8. The method of claim 7, further comprising the steps of:

determining, during the portion of the measuring period, whether another thread other than the selected thread is in another state other than the selected state (column 24, lines 45);

when it is determined that the other thread is in the other state, determining an amount of time that the other thread is in the other state (column 24, lines 45-52); and

calculating a percent of the portion of the measuring period that constitutes the amount of time that the other thread is in the other state (column 23, lines 43-59).

9. The method of claim 7, further comprising the steps of:

determining, during the portion of the measuring period, whether another thread other than the selected thread is in the selected state (column 23, lines 43-59);

when it is determined that the other thread is in the selected state, determining an amount of time that the other thread is in the selected state (column 23, lines 43-59);  
and

calculating a percent of the portion of the measuring period that constitutes the amount of time that the other thread is in the selected state (column 23, lines 43-59).

Art Unit: 2114

10. A method in a data processing system having a program with a plurality of states, wherein the program executes via a plurality of paths during a measuring period, the method comprising the steps of:

receiving user input indicating a selected one of the plurality of states (column 24, lines 45-52);

receiving user input indicating a selected one of the plurality of paths of execution (column 53-63); and

determining a portion of the measuring period during which the selected path of execution is in the selected state (Figure 12e).

11. A method in a data processing system having a program with a plurality of threads having a plurality of states, the method comprising the steps of:

running the program and determining the state of each thread during a measuring period, wherein the measuring period comprises a plurality of time intervals (column 23, table 2, figures 12e and 26);

receiving user input indicating a selected one of the plurality of states (column 24, lines 45-52);

receiving user input indicating a selected one of the plurality of threads (column 23, lines 53-63);

determining a portion of the measuring period during which the selected thread is in the selected state (column 23);



determining, during the portion of the measuring period, whether another thread other than the selected thread is in the selected state (column 23); and

when it is determined that the other thread is in the selected state, determining an amount of time that the other thread is in the selected state (column 23, lines 43-59).

12. The method of claim 11, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the other thread is in the selected state (column 23, lines 43-59).

13. A method in a data processing system having a program with a plurality of threads having a plurality of states, wherein the program executes during a measuring period and the measuring period comprises a plurality of time intervals, the method comprising the steps of:

receiving user input indicating one of the plurality of states to anchor (column 24, lines 45-52);

receiving user input indicating a selected one of the plurality of threads (column 24, lines 53-63);

determining a portion of the measuring period during which the selected thread is in the anchored state (column 12e);

determining, during the portion of the measuring period, whether another thread other than the selected thread is in the anchored state (column 23); and

when it is determined that the other thread is in the anchored state, determining an amount of time that the other thread is in the anchored state (column 23).

14. The method of claim 13, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the other thread is in the anchored state (column 23, lines 43-59).

15. A method in a data processing system having a program with a plurality of threads having a plurality of states, the method comprising the steps of:

running the program and determining the state of each thread during a measuring period, wherein the measuring period comprises a plurality of time intervals (column 23, table 2, figures 12e and 26);

receiving user input indicating a selected one of the plurality of states )column 24, lines 45-52);

determining a portion of the measuring period during which any of the plurality of threads is in the selected state (column 24, lines 53-63);

determining, during the portion of the measuring period, whether a selected one of the plurality of threads is in another state other than the selected state (column 23);  
and

when it is determined that the selected thread is in the other state, determining an amount of time that the selected thread is in the other state (column 23).

16. The method of claim 15, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the selected thread is in the other state (column 23, lines 43-59).

17. The method of claim 15, further comprising the steps of:

determining, during the portion of the measuring period, whether the selected thread is in the selected state (column 43-59);

when it is determined that the selected thread is in the selected state, determining a second amount of time that the selected thread is in the selected state (column 23, lines 43-59);

and calculating a percent of the portion of the measuring period that constitutes the second amount of time that the selected thread is in the selected state (column 23, lines 43-59).

18. A method in a data processing system having a program with a plurality of threads having a plurality of states, wherein the program executes during a measuring period and the measuring period comprises a plurality of time intervals, the method comprising the steps of:

receiving user input indicating one of the plurality of states to anchor (column 24, lines 45-52);

determining a portion of the measuring period during which any of the plurality of threads is in the anchored state (column Figure 12e);

determining, during the portion of the measuring period, whether a selected one of the plurality of threads is in another state other than the anchored state (column 23); and

when it is determined that the selected thread is in the other state, determining an amount of time that the selected thread is in the other state (column 23).

19. The method of claim 18, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the selected thread is in the other state (column 23, lines 43-59).

20. The method of claim 18, further comprising the steps of:

determining, during the portion of the measuring period, whether the selected thread is in the anchored state (column 23, lines 43-59);

when it is determined that the selected thread is in the anchored state, determining a second amount of time that the selected thread is in the anchored state (column 23, lines 43-59);

and calculating a percent of the portion of the measuring period that constitutes the second amount of time that the selected thread is in the anchored state (column 23, lines 43-59).

21. A method in a data processing system having a program with a plurality of threads having a plurality of states, wherein the program executes during a measuring period

Art Unit: 2114

and the measuring period comprises a plurality of time intervals, the method comprising the steps of:

receiving user input indicating a selected one of the plurality of states (column 24, lines 45-52); and

determining a portion of the measuring period during which any of the plurality of threads is in the selected state (column 12e).

22. The method of claim 21, further comprising the steps of:

determining, during the portion of the measuring period, whether a selected one of the plurality of threads is in another state other than the selected state (column 23);

when it is determined that the selected thread is in the other state, determining an amount of time that the selected thread is in the other state (column 23); and

calculating a percent of the portion of the measuring period that constitutes the amount of time that the selected thread is in the other state (column 23, lines 43-59).

23. The method of claim 21, further comprising the steps of:

determining, during the portion of the measuring period, whether a selected one of the plurality of threads is in the selected state (column 23);

when it is determined that the selected thread is in the selected state, determining an amount of time that the selected thread is in the selected state (column 23); and

calculating a percent of the portion of the measuring period that constitutes the amount of time that the selected thread is in the selected state (column 23).

24. A method in a data processing system having a program with a plurality of states, wherein the program executes via a plurality of paths during a measuring period, the method comprising the steps of:

receiving user input indicating a selected one of the plurality of states (column 24, lines 45-52); and

determining a portion of the measuring period during which any of the plurality of paths of execution is in the selected state (column 12e).

25. A method in a data processing system having a program with a plurality of threads having a plurality of states, the method comprising the steps of:

running the program and determining the state of each thread during a measuring period, wherein the measuring period comprises a plurality of time intervals (column 23, Figures 12e and 26, and table 2);

receiving user input indicating a selected one of the plurality of states (column 24, lines 45-52);

determining a portion of the measuring period during which any of the plurality of threads is in the selected state (column 12e);

determining, during the portion of the measuring period, whether a selected one of the plurality of threads is in the selected state (column 23); and

when it is determined that the selected thread is in the selected state, determining an amount of time that the selected thread is in the selected state (column 23).

26. The method of claim 25, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the selected thread is in the selected state (column 23).

27. A method in a data processing system having a program with a plurality of threads having a plurality of states, wherein the program executes during a measuring period and the measuring period comprises a plurality of time intervals, the method comprising the steps of:

receiving user input indicating one of the plurality of states to anchor (column 24, lines 45-52);

determining a portion of the measuring period during which any of the plurality of threads is in the anchored state (column 2, lines 45-52);

determining, during the portion of the measuring period, whether a selected one of the plurality of threads is in the anchored state (column Figure 12e); and

when it is determined that the selected thread is in the anchored state, determining an amount of time that the selected thread is in the anchored state (column 23).

Art Unit: 2114

28. The method of claim 27, further comprising the step of calculating a percent of the portion of the measuring period that constitutes the amount of time that the selected thread is in the anchored state (column 23).

Claims 29-56 are the computer instruction implementation of the method of claims 1-28 and are rejected on the same grounds show above.

Claims 57-73 are the data system implementation of the method claims 4, 7-9, 13, 14, 18-23, 25, 26 and 10 respectively and are rejected on the same grounds.

#### Conclusion

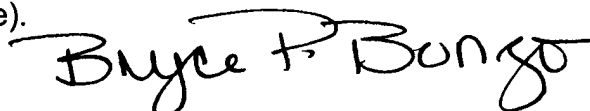
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryce P Bonzo whose telephone number is (571)272-3655. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 2114

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Bryce P. Bonzo". The signature is fluid and cursive, with the first and last names being more prominent than the middle initial.

Bryce P Bonzo  
Primary Examiner  
Art Unit 2114